

## **Fives-Pillard Burners**

Mysko, David to: Benjamin W Cook, JPJarvi Cc: "Teresa J Simetkosky", "Robert K Wilmunen", "Timothy J Kalisch" Holds:13-GG USEPA Denial of Minnesota State Implementation Plan 03/27/2014 02:56 PM

I just got off the phone with Max Vaccaro from Fives-Pillard, a kiln burner manufacturer. I believe they were involved in the discussions at Step III and were one of the bidders for the work ultimately won by Coen.

I attempted to contact them to see if they would be interested in the Step II work, and Max indicated that:

- 1) They do not have a current low-nox kiln burner design. They do make multi-fuel burners (biomass included) for kiln applications.
- 2) They are aware of the approach taken by Coen (stoichiometric cold ambient excess air) and how it works, but are also aware of the fuel and process penalties involved.
- 3) They have several ideas regarding how to design a new style low-NOx burner which would give the low-NOx performance without the other penalties. They are looking for a client to partner with to develop the design, and are interested in working with U.S. Steel in this capacity.

Max will be in the U.S. in a few weeks and was interested in discussing this with Hatch / USS. Would you folks be interested in pursuing a different approach? Do you want to meet with Max to discuss the possibilities? Would you want to meet out there, or have him come in here and we can tie you guys in via conf call? Is there someone at USS research who has some theoretical combustion design background we should pull into the conversation?

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